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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,910	03/18/1999	DIRK VAN DIJK	VR2-002	8639

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 10/04/2002

31

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/171,910	VAN DIJK ET AL.	
	Examiner	Art Unit	
	Alicia Chevalier	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449), Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

RESPONSE TO AMENDMENT

1. The request filed on July 11, 2002 for a Request for Continued Examination (RCE) is acceptable and a RCE has been established. An action on the RCE follows.

WITHDRAWN REJECTIONS

2. The objections to the claims and 35 U.S.C. 112 rejections of record in paper #24, pages 2-4, paragraphs #3-4 have been withdrawn due to Applicant's amendment in paper #29.
3. The 35 U.S.C. 103 rejection over Bevan (3,770,859) in view of Woodham (5,474,722) of record in paper #24, pages 4-6, paragraph #5 has been withdrawn due to Applicant's amendment in paper #29.

NEW REJECTIONS

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

5. Claims 58, 59, 62-64, 67-69 and 72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 58 and 62 are unclear in scope which renders that claims vague and indefinite.

Claim 56 now recites "small particles being fibers ...(and) ... large particles." Claim 58 recites

Art Unit: 1772

“particles are made of wood material” and claim 62 recites “particles include wood material.” It is unclear if this is referring only to the large particle since the small particles can only be fibers now. Furthermore, it is generally unclear if wood material refers to a fiber or particulate matter.

Claims 67 and 69 are unclear in scope which renders the claims vague and indefinite. It is unclear from the claim language if the non-wood material present in the plastic mass is one of the small or large particles or an additional filler with no specified orientation.

Claim 68 is unclear which renders the claim vague and indefinite. Claim 68 recites non-wood material (claim 67) “are made from a material selected from the group consisting of flax, jute, hemp, sisal, coconut, bamboo and miscanthus.” These materials are bast fibers which are woody fibers, see *The Dictionary of Fiber and Textile Technology*. The claim is indefinite because these fibers are woody. Although the terms of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. *In re Cohn*, 438 F.2d 989, 169 USPQ 95 (CCPA 1971); *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970). MPEP 2173.03.

Claim 72 is indefinite because it fails to set forth the composition or structure of the additive and only claims properties of the additive. Claims that merely set forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future. *Ex parte Slob* (PO BdApp) 157 USPQ 172.

Claim Rejections - 35 USC § 102

6. Claims 56, 57, 60, 70, 71, and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Jex (5,273,819).

Jex discloses an improved ram extruded composite product comprising large, medium, and small carbon fibers mixed in a thermoset resin (col. 6, line 64 to col. 5, line 5). The large and medium fibers range in size from about .25 inch to about 2 inch (about 6-50 mm) and are predeterminedly oriented perpendicularly to the longitudinal axis (col. 4, lines 35-41). The short fibers are less than about .125 inch (less than about 3 mm), commonly in the range of 1/32 to 1/16 of an inch (0.8-1.5 mm) and are randomly oriented (col. 7, lines 3-5 and 56-59). The composite product may also include other conventional materials such as fillers, lubricant, powders which are known in the art (col. 11, lines 39-41).

Claim Rejections - 35 USC § 103

7. Claims 56-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cogswell et al. (4,559,262).

Cogswell discloses a fiber reinforced composition comprising a thermoplastic matrix with embedded long and short fibers. Suitable fiber material is glass, carbon, jute and high modulus synthetic polymers (col. 3, lines 3-5). The thermoplastic polymer maybe polypropylene or polyethylene (col. 3, lines 51-68). The long fibers are 3-100 mm in length and are present in at least 50% by weight (col. 7, lines 49-63). Further more tat least 50% of the fibers be volume are aligned in the direction of draw. The short fibers have a length of up to 0.25 mm and are blended into the mix (col. 9, lines 48-65).

Art Unit: 1772

Cogswell, further discloses that randomly oriented fibers gain exceptionally high strength measured in all directions (col. 10, lines 20-28). Although, Cogswell is silent about orientation of the short fibers, it would be obvious to one of ordinary skill in the art to randomly orient the fibers since it would help the article to gain strength in all directions. Further evidenced by pat. no. 5,273,819.

Cogswell discloses the claimed invention except that the particles are fir, spruce, birch, or poplar instead of jute. These are taken to be equivalent materials since they are all woody fibers as seen in by the Dictionary of Fiber and Textile Technology. Therefore, because these fibers are art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute jute for any of fir, spruce, birch, or poplar.

The exact ratio between the length in the first particle direction and the transverse dimension of the wood material particles is deemed to be a cause effective variable. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the ratio through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Further more, Cogswell further disclose that the lengths of the aligned fibers, the thickness of the ape, the shaped mandrel would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end result (col. 7, line 52 to col. 8, line 37). Therefore, one of ordinary skill in the art would have recognized that the exact ratio between the length in the first particle direction and the transverse dimension of the wood material particle is deemed to be a cause effective variable as suggested by

Art Unit: 1772

Cogswell. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the value of the cause effective variable such as the ratio through routine experimentation depending on the end results as suggested by Cogswell in the absence of showing of criticality in the claimed combined thickness.

ANSWERS TO APPLICANT'S ARGUMENTS

8. Applicant's arguments filed in paper #29 regarding the previous rejections of record are moot since the rejections have been withdrawn.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays


If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

9/28/02




HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/30/02